# General Electric PANELGLOW* LUMINAIRE

BRIGHTNESS CONTROL: GE luminaires using High Intensity Discharge (H.I.D.) light sources provide high light levels with minimum glare; create soft, filtered light that brightens your interior design.

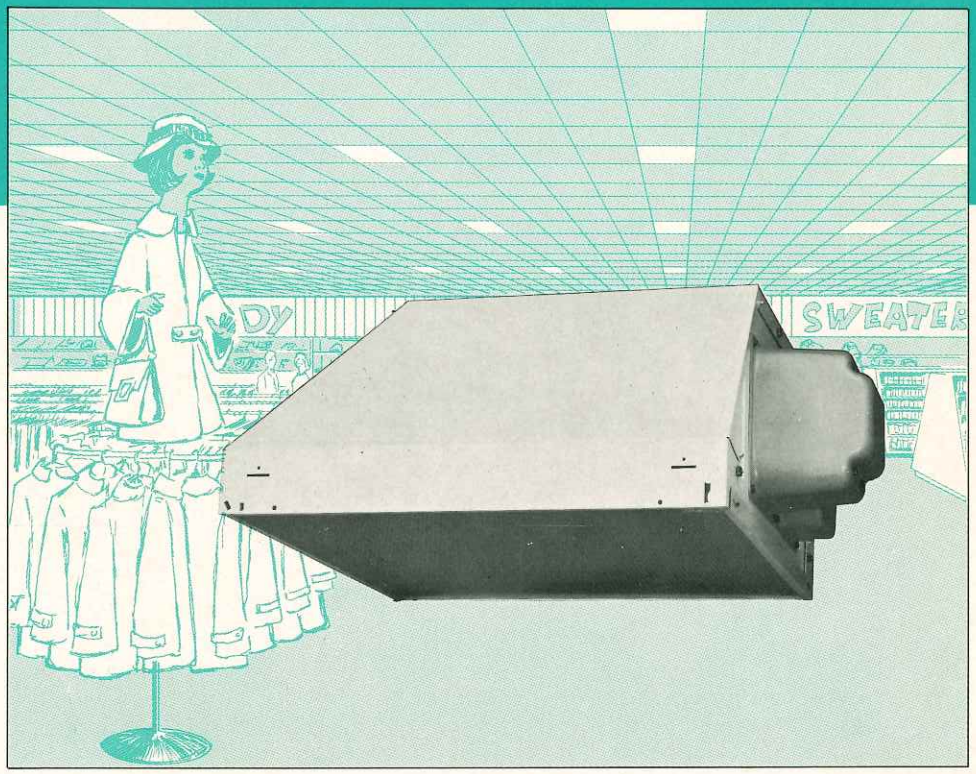
ECONOMICAL: Higher lighting levels from H.I.D. light sources for the same lighting dollar. Measure your relamping time in years, rather than in months.

GOOD LOOKING: The standard flush luminaire design offers a smooth streamlined appearance. One of the following options or accessories may also be chosen to meet aesthetic requirements: a decorative 2-inch regress trim, a hinged regressed, hinged flat, or hinged drop panel.

FAST INSTALLATION: The modular construction of the Panelglow permits quick installation from below the ceiling. The Powr/Module* ballast assembly snaps out easily for upgrading to future H.I.D. light sources.

VERSATILE: A 2 x 2 luminaire for inverted T-bar ceilings. Use for retail/grocery/discount stores, public buildings, lobbies, and many other indoor areas.

A 2 x 2 ENCLOSED LUMINAIRE for inverted T-bar ceilings. Use with mercury, metal halide, or Lucalox® lamp sources.




## FEATURES:

1. **MODULAR CONSTRUCTION:** For ease of installation, the unit consists of three modules—housing module, Powr/Module, and optical module—and a lens. The housing module is quickly inserted into a 2 x 2 inverted T-bar ceiling; the other two modules are easily snapped onto it. The lens is effortlessly angled into the unit. The entire luminaire can be installed from below or above the ceiling.
2. **LOW BRIGHTNESS:** The unique wrap around, computer-designed, prismatic refractor distributes the lumen output evenly over the lens. The precisely engineered optical system—lens, refractor, and reflector—provides excellent uniformity and eliminates hot spots and direct glare.
3. **POWR/MODULE:** Unique Powr/Module ballast snaps out for maintenance or upgrading to future H.I.D. light sources.
4. **SOUND CONTROL:** Years of quality ballast manufacturing experience combined with modern sound-sensitive testing equipment provide a uniquely designed ballast for quiet operation in today's environment-conscious society.
5. **QUALITY FINISH:** The durable white enamel electrocoat finish adds a quality touch while providing high reflectance and years of dependable service.
6. **LOW MAINTENANCE COSTS:** Because relamping, ballast change-out, and cleaning can be accomplished from below, maintenance costs are held to a minimum.

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Rec'd Oct. 16, 1972

GENERAL ELECTRIC

# PANELGLOW LUMINAIRE GUIDE FORM SPECIFICATION

## GENERAL DESCRIPTION

The luminaire shall be General Electric catalog number (specify) to operate one (400 Watt Mercury or Metal Halide) (one 250 Watt Lucalox) lamp from a nominal (120, 208, 240, 277 or 480) volt 60 hertz power source. The luminaire shall include a completely prewired integral ballast module and "plug-in" prismatic refractor assembly. The luminaire shall be suitable for continuous service indoors where the plenum ambient temperature does not exceed 75° C.

## MECHANICAL CONSTRUCTION

The luminaire shall fit 2' x 2' inverted T-Bar suspension system ceilings. To facilitate mounting and maintenance the luminaire shall have separable components: housing, ballast module, prismatic refractor assembly, and the virgin acrylic lens. The ballast module and prismatic refractor assembly shall be so designed that they "snap-into" the housing. All wiring access and ballast access shall be from below without the need to disturb adjacent panels.

## BALLAST OPERATION

The ballast shall be capable of starting and operating the specified lamp within the limits specified by the lamp manufacturer. The ballast shall limit lamp wattage variation to a maximum of ± 5% for mercury or ± 10% for metal halide and Lucalox during ballast input voltage variations of ±10% from nominal. At rated line voltage the ballast shall have a minimum power factor of 92%. Ballast primary current during lamp starting must not exceed current during normal lamp operation. The ballast shall be capable of withstanding continuous operation with the ballast secondary in a short circuit condition without loss of ballast life.

## PHOTOMETRIC DATA

Mercury, 400 Watt—Deluxe—H400DX33-1
Curve Number 35-175397—1.2 S/MH

Metal Halide, 400 Watt—MV-400/HV/E
Curve Number 35-175399—1.35 S/MH

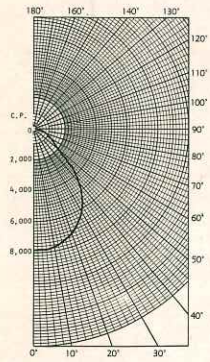
Lucalox, 250 Watt—LU-250/BD
Curve Number 35-175402—1.3 S/MH

### SAMPLE PHOTOMETRIC DATA

400 Watt Deluxe White Mercury—H400DX33-1

COEFFICIENTS OF UTILIZATION – ZONAL CAVITY METHOD
EFFECTIVE FLOOR CAVITY REFLECTANCE 20% ($\rho_{fc}$ = 0.20)

| ROOM CAVITY RATIO (RCR) | EFFECTIVE CEILING CAVITY REFLECTANCE – PERCENT | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 80 | | | 70 | | | 50 | | | 30 | | | 10 | 0 |
| % WALL REFLECTANCE | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 30 10 | 0 |
| 0 | | | | | | | | | | | | | | |
| 1 | .689 | .666 | .649 | .674 | .655 | .640 | .646 | .631 | .621 | .625 | .612 | .602 | .603 .592 .585 | .572 |
| 2 | .624 | .595 | .568 | .616 | .587 | .566 | .592 | .572 | .551 | .576 | .556 | .539 | .556 .543 .526 | .517 |
| 3 | .571 | .535 | .504 | .562 | .529 | .501 | .546 | .516 | .490 | .530 | .505 | .485 | .515 .494 .476 | .466 |
| 4 | .520 | .482 | .455 | .514 | .476 | .448 | .499 | .469 | .443 | .486 | .461 | .439 | .475 .452 .433 | .423 |
| 5 | .477 | .437 | .407 | .470 | .432 | .405 | .460 | .426 | .402 | .449 | .419 | .398 | .438 .414 .392 | .383 |
| 6 | .430 | .392 | .368 | .427 | .390 | .362 | .416 | .387 | .362 | .408 | .380 | .357 | .402 .375 .355 | .347 |
| 7 | .394 | .356 | .328 | .381 | .351 | .326 | .381 | .348 | .326 | .373 | .344 | .319 | .367 .339 .321 | .311 |
| 8 | .363 | .324 | .298 | .349 | .320 | .295 | .351 | .322 | .295 | .346 | .314 | .291 | .340 .310 .290 | .282 |
| 9 | .322 | .289 | .265 | .309 | .287 | .265 | .311 | .282 | .263 | .308 | .282 | .261 | .304 .281 .261 | .254 |
| 10 | .296 | .263 | .241 | .269 | .263 | .241 | .287 | .258 | .240 | .285 | .258 | .236 | .281 .257 .236 | .229 |




| SUMMARY DATA | | | |
|---|---|---|---|
| ZONE | LUMENS | % BARE LAMP | % LUMINAIRE |
| 90°-180° | 0 | 0 | 0 |
| 0°-90° | 14,298 | 64 | 100 |
| 0°-60° | 13,110 | 58 | 92 |
| 0°-30° | 5,990 | 27 | 42 |
| 0°-180° | 14,298 | 64 | 100 |
| TOTAL EFFICIENCY: | | 64 | |

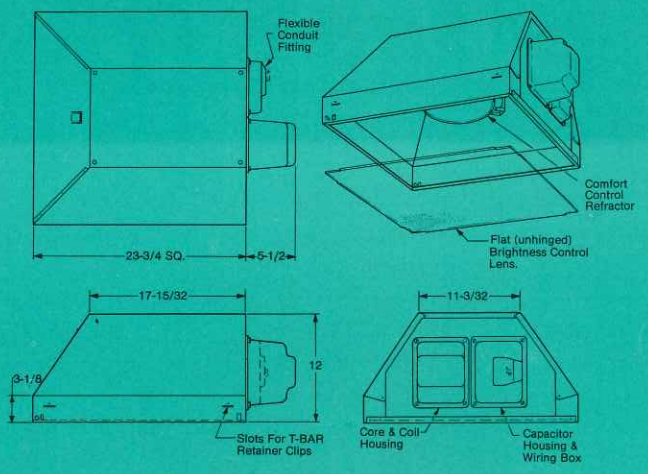
CANDELA AND LUMEN DATA ARE SHOWN FOR 22,500 LUMENS AT THE SOURCE. EXPECTED PERFORMANCE VALUES FOR ANY OF THESE ITEMS MAY BE DETERMINED BY MULTIPLYING GIVEN VALUES BY AN APPROPRIATE FACTOR SUCH AS: LAMP LUMEN RATING x BALLAST FACTOR x MAINTENANCE FACTOR ÷ 22,500 LUMENS


GENERAL ELECTRIC COMPANY
Lighting Systems Business Department, Hendersonville, N. C.



4/72 (30M)


## DIMENSIONS




## ORDERING INFORMATION

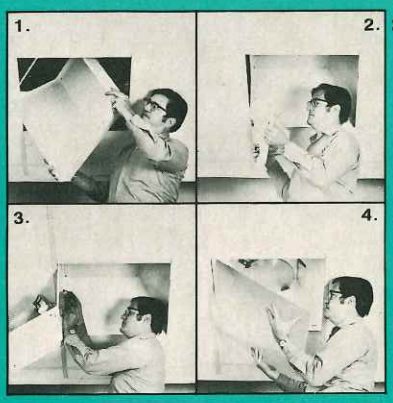
| LAMP TYPE | VOLTS | COMPLETE LUMINAIRE CAT. NUMBER | COMPONENT ASSEMBLIES | | |
|---|---|---|---|---|---|
| | | | BALLAST MODULE | HOUSING W/OPT. ASM. | ACRYLIC LENS |
| 400 Watt Mercury | 120 | C863G001 | C868G001 | C869G001 | C866G001 |
| | 208 | C863G002 | C868G002 | C869G001 | C866G001 |
| | 240 | C863G003 | C868G003 | C869G001 | C866G001 |
| | 277 | C863G004 | C868G004 | C869G001 | C866G001 |
| | 480 | C863G005 | C868G005 | C869G001 | C866G001 |
| 400 Watt Metal Halide | 120 | C863G016 | C868G016 | C869G001 | C866G001 |
| | 208 | C863G017 | C868G017 | C869G001 | C866G001 |
| | 240 | C863G018 | C868G018 | C869G001 | C866G001 |
| | 277 | C863G019 | C868G019 | C869G001 | C866G001 |
| | 480 | C863G020 | C868G020 | C869G001 | C866G001 |
| 250 Watt Lucalox | 120 | C863G501 | C868G501 | C869G005 | C866G001 |
| | 208 | C863G502 | C868G502 | C869G005 | C866G001 |
| | 240 | C863G503 | C868G503 | C869G005 | C866G001 |
| | 277 | C863G504 | C868G504 | C869G005 | C866G001 |
| | 480 | C863G505 | C868G505 | C869G005 | C866G001 |

**OPTIONS:** 1. Emergency Lighting—Instant On/Automatically Switched Quartz.
2. Hinged, decorative 1" regress panel.
3. Hinged, flat, gasketed frame for an acrylic lens.
4. Hinged, decorative drop panel (3-inches).

**ACCESSORIES:** Black, decorative, 2-inch regress trim.

**WEIGHTS:**
Complete luminaires
400-watt mercury ..... 41 lbs.
400-watt metal halide ..... 44 lbs.
250-watt Lucalox ..... 51 lbs.

**1. Installing Housing Module**




**2. Snapping In Powr/Module Ballast Assembly**

**3. Snapping In Optical Module**

**4. Angling In Lens**

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